CITY OF ISSAQUAH

DRAFT STORMWATER MANAGEMENT PROGRAM PLAN (SWMP)

March 2022

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EXECUTIVE SUMMARY

The City of Issaquah has obtained coverage under a NPDES (National Pollution Discharge Elimination System) Phase II Municipal Stormwater Permit issued by the Washington State Department of Ecology (Ecology). The NPDES permit is a federal requirement under the Clean Water Act that regulates stormwater and wastewater discharges to waters of the State with those requirements delegated to Ecology when the first Permit was issued in 2007 and subsequent Permits in 2013 and 2019. The 2019-2024 Permit requires that all affected municipalities create and implement a Stormwater Management Program (SWMP), which address the following Program components:

1. Stormwater Planning
2. Public Education and Outreach
3. Public Involvement and Participation
4. MS4 Mapping and Documentation
5. Illicit Discharge Detection and Elimination (IDDE)
6. Controlling Runoff from New Development, Redevelopment and Construction Sites
7. Operations and Maintenance
8. Source Control Program for Existing Development
9. Total Maximum Daily Load (TMDL)
10. Monitoring and Assessment

This document was prepared to meet the City's NPDES permit requirement for development of a *Stormwater Management Program* (SWMP) Plan. The SWMP outlines all the requirements of the Permit and a summary of the City's work to meet those requirements.

THE GOAL

To reduce the discharge of pollutants from, and the entry into, the City's Municipal Separate Storm System (MS4) to the maximum extent practicable to protect water quality.

Stormwater Planning

- The City submitted to Ecology for review the final draft Baseline Assessment Reports and Stormwater Management Options (SMOs) matrix for 5 of 6 basins. The remaining basin assessment of the Laughing Jacobs Creek basin is currently being finalized and is based on information provided by the City of Sammamish as part of the Laughing Jacobs Creek Basin Plan.
- The City completed the prioritization of over 300 flooding, water quality and habitat issues that were identified as part of an outreach and engagement process involving City staff, County and State agencies, local governments, non-profits and city residents. After identifying the 300 plus issues, the consultant developed over 200 SMOs for further consideration.

Public Education and Outreach

- The City joined the regional Dumpster Lid Community Based Social Marketing educational campaign to reduce stormwater contamination. Open dumpsters cause problems for local waterways. When lids are left open, rainwater gets in. Then dumpster juice can leak from dumpsters or pour out when it is emptied into the garbage truck. When this happens, pollution from the dumpster juice gets washed into the nearest storm drain and then flows into creeks and streams
- 6,958 trees and shrubs were planted in City open space
- 27 Environmental Stewardship volunteer events held with a total of 876 volunteer hours.
- Technical assistance to businesses and private property owners on pollution prevention and stormwater facility maintenance.
- In collaboration with other (STORM) cities, provided funding for and participated in regional marketing campaigns.

MS4 Mapping and Documentation

- Completed collecting data on the size and material for all known MS4 outfalls during normal course of business.

Illicit Discharge Detection and Elimination (IDDE)

- The City received and responded to 61 water quality calls or electronic reports that included: non-stormwater discharges, spills, illicit connections, and illegal dumping.
- The City identified and eliminated illicit discharges or connections through business source control and groundwater protection technical assistance visits, the private

stormwater inspection program, and on-site sewer program. Combined these programs resulted in 57 inspections being performed in 2021.

Controlling Runoff from New Development, Redevelopment, and Construction Sites

- Permitting/Plan Review for new development and redevelopment applications (92 sites in 2021).
- Inspections of permitted sites during pre-construction, construction, and post construction inspections (71 sites in 2021).

Operation and Maintenance

- 99% annual municipal stormwater treatment and flow control BMPs/facilities inspected (352 facilities)
- 100% annual private stormwater treatment and flow control BMPs/facilities inspected on permitted sites.
- The City maintained 158,780 sq. ft. of pervious surfaces using the Triverus Municipal Cleaning Vehicle (MCV).
- Removed approximately 5,955 pounds of trash, located within the City's Parks and Open Space properties.

INTRODUCTION

PURPOSE

This document was prepared to meet the City of Issaquah's (City) requirement for development of a *Stormwater Management Program*, or SWMP as required under condition S5 of the Western Washington Phase II Municipal Stormwater Permit (Permit). This SWMP outlines all requirements of the Permit and a summary of the City's work program to maintain compliance with conditions in the Permit between January 1, 2021 and December 31, 2021.

THE NPDES PROGRAM

The National Pollutant Discharge Elimination System (NPDES) is a program created under the Federal Clean Water Act with the intent of protecting and restoring water quality in lakes and stream so that they can support "beneficial uses" such as fishing and swimming. Governmental and private entities wishing to discharge water or wastewater to surface waters regulated by the Federal Government (Waters of the US) must obtain permits and comply with certain conditions or face fines and other penalties.

In Washington State, the US Environmental Protection Agency has delegated the authority over NPDES permits to the Washington State Department of Ecology (Ecology). Ecology has issued several general permits for discharges from stormwater systems that apply to municipalities with different sizes of populations. Phase II, refers to those municipalities with a population of less than 100,000, according to the 1990 census.

THE WESTERN WASHINGTON PHASE II MUNICIPAL STORMWATER PERMIT

The City of Issaquah has a population of 39,509 (2019 Census Estimate) and must comply with the Phase II Municipal Stormwater Permit. The Permit was originally issued by the State Department of Ecology under a 5-year term, effective from February 16, 2007 to February 15, 2012. On August 1, 2013, Ecology extended the first Permit to July 21, 2013 and issued a new five year Permit (2013-2018), effective August 1, 2013. In the fall of 2017, Ecology again extended the existing permit to August of 2019.

The Phase II Permit was appealed by several parties, causing Ecology to modify the Permit and 2012 Ecology Stormwater Management Manual, in response to the state Pollution Control Hearing rulings. Ecology responded by issuing a modified Permit and Manual in 2014, which became effective on January 16, 2015.

On July 1, 2019 a new five year Permit was issued with an effective date of August 1, 2019 expiring July 31, 2024 (2019-2024).

The Permit allows municipalities to discharge stormwater from municipal systems into "waters of the state" such as rivers, lakes and streams, as long as pollutants in stormwater

are reduced to the "maximum extent possible" by coordinating and implementing programs and activities in the following program areas:

1. Stormwater Planning
2. Public Education and Outreach
3. Public Involvement and Participation
4. MS4 Mapping and Documentation
5. Illicit Discharge Detection and Elimination (IDDE)
6. Controlling Runoff from New Development, Redevelopment and Construction Sites
7. Operations and Maintenance
8. Source Control Program for existing Development
9. Total Maximum Daily Load (TMDL)
10. Monitoring and Assessment

PERMIT REPORTING

Progress on implementing this SWMP is documented annually in an Annual Report that is submitted to Ecology along with this SWMP by March 31. The Annual Report, current SWMP, and associated documentation are also posted on the City's web site (http://www.issaquahwa.gov/stormwaterpermit) under the Public Works Engineering homepage.

The Annual Report for the 2021 calendar year is the third report under the 2019-2024 Permit.

Specific reporting requirements as contained in the Permit are summarized in the following sections. Each department is responsible for carrying out the required permit conditions and developing and maintaining documentation.

CURRENT AND PLANNED ACTIVITIES

Each Permit section will describe the Permit requirements, current and planned activities for each specific element of the Stormwater Management Program.

DEPARTMENTAL RESPONSIBILITIES AND COORDINATION

The Permit broadly applies to many City activities, including maintenance and operations of City facilities, permitting and inspections of new development and redevelopment, and other activities conducted in different City departments, including:

- Public Works Department (PWD)
- Community Planning and Development (CPD)

- Parks and Facility Maintenance, and
- Office of Sustainability (OS)
- Communications (COM)
- Issaquah Police Department (IPD)

Compliance with the permit requires coordination and documentation activities in several City departments. PWD coordinates with City departments to verify that all Permit requirements are being implemented and Annual Reports are submitted on schedule. Further refinement of these tasks will be conducted during each budget year, in accordance with the specific permit conditions.

TABLE 1-WESTERN WASHINGTON PHASE II MUNICIPAL STORMWATER PERMIT OVERVIEW 2019-2024

The timeline below provides an overview of major program deadlines for implementing permit requirements of S5 *Stormwater Management Program* (SWMP) and S8 *Monitoring and Assessment* for Continuing City, Town, and County Permittees (**By Date** means "no later than…"). This is guidance only. Table does not include all ongoing program elements. Please see the permit for additional detail and related requirements.

S5 Permit Components	Ongoing Program Implementation	2019	2020	2021	2022	2023	2024
A. Stormwater Management Plan	**Annually** update & submit the SWMP with Annual Report (S9) - A.3.a. $ tracking: track the cost (or estimate) of development and implementation of each component of the SWMP - A.3.b. activity tracking: track # of inspections, follow up actions, official enforcement, public ed activities						
A.5. Coordination	**Ongoing** coordination			**By March 31:** Submit description of internal coordination mechanisms			

C.1 Stormwater Planning		**Annually** assess and report LID code-related requirements.	**By Aug. 1**: Convene interdisciplinary team to lead SW Planning program.	**By March 31**: Respond to series of Annual Report (AR) questions describing SW Planning during 13-19 permit	**By March 31:** Submit watershed inventory. **By June 30:** Document the prioritized and ranked list of receiving water basins.	**By Jan. 1:** Submit report of responses to SW Planning AR questions for coordination of long range plans during this permit term **By March 31:** Develop Stormwater Management Action Plan (SMAP) for at least 1 high priority area.	

C2. Public Education and Outreach	**Ongoing** implementation of ed & outreach program elements		**By July 1:** Conduct new evaluation of effectiveness of current behavior change campaign	**By Feb 1:** Follow community-based social marketing practices, or similar, to develop or modify behavior change campaign tailored to the community **By Apr 1:** Implement Strategy developed in S5.C.2.a.ii.(c)			**By March 31:** Evaluate & report on implemented strategy

S5 Permit Components	Ongoing Program Implementation	2019	2020	2021	2022	2023	2024
C.3 Public Involvement and Participation	**Ongoing** -Create opportunities for public, including overburdened communities, to participate in SWMP and SMAP - Post to website SWMP and Annual Report by **May 31** each year						
C.4 MS4 Mapping and Documentation	**Ongoing** Maintain mapping data		**By Jan 1:** Begin to collect size and material for all known MS4 outfalls	**By Aug 1**: mapping data in electronic format with fully described mapping standards		**By Aug 1**: Complete mapping all known MS4 connections to privately-owned stormwater systems	
C.5 Illicit Discharge Detection and Elimination	**Ongoing** - Implement program to prohibit, address, and eliminate illicit discharges. - Train staff	**By Aug 1**: Begin tracking total % of MS4 screened	**By Mar 31**: MAY Begin using WQwebIDDE form for annual reporting - If using own tracking: submit as much of the info as possible in format requested (or similar)	**By Mar 31**: Required to use WQwebIDDE form for annual reporting - If using own tracking: submit .xml file that follows the schema, but may submit alternative formats (i.e. .xls,.csv, .txt)	**By Mar 31**: If using own tracking system for recordkeeping, submit a .xml that follows the data schema		

S5 Permit Components	Ongoing Program Implementation	2019	2020	2021	2022	2023	2024
C.6 Controlling Runoff	-Implement & enforce program to reduce pollutants in runoff. -Train staff.				**By June 30:** Adopt and make effective program that meets requirements of App. 1 or equivalent PH I program.(See permit for other dates)		
C.7 Operations and Maintenance	-Inspect & maintain stormwater facilities and catch basins controlled by & regulated by the Permittee. - Implement practices, policies, and procedures to reduce SW impacts from all permittee lands. -Train staff.				**By June 30:** Update maintenance standards **By Dec 31:** Document practices, policies, and procedures to reduce SW impacts from all permittee lands. **By Dec 31:** Update SWPPPs for heavy equipment maintenance or storage yards/facilities.		

C.8 Source Control					**By Aug 1:** -Adopt & make effective ordinances requiring source control BMPs. -Establish inventory of properties with potential to generate pollutants to Permittee's MS4	**By Jan 1:** -Implement inspection program -Implement progressive enforcement policy - Train staff	

S8 Monitoring and Assessment

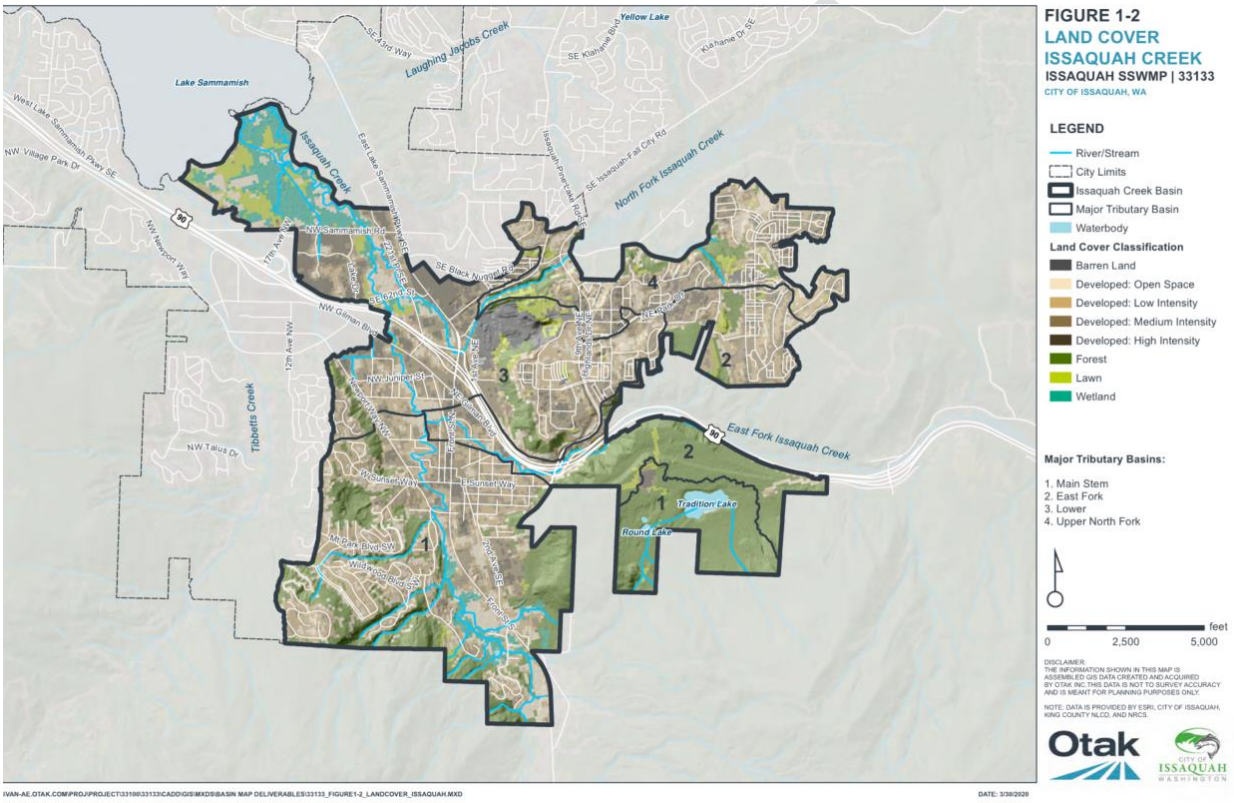
S8 Permit Components	2019	2020	2021	2022	2023	2024
S8.A Regional status and trends monitoring	**By Dec 1:** submit payment to collective fund if payed into during 2013 permit. - Submit written notification of option selected	**By Aug. 15:** If option chosen, make annual payments to collective fund				
S8.B SWMP Effectiveness and Source ID	**By Dec 1:** submit payment to collective fund if payed into during 2013 permit. -Submit written notification of option selected	**By Aug. 15:** If option chosen, make annual payments to collective fund				
S8.C Stormwater discharge monitoring		**By Feb 1**: If option chosen, submit draft QAPP for review and approval **By Aug 15**: submit final QAPP for approval within 60days of receiving approval of draft **By Oct 1**: Begin flow monitoring	**By Oct 1:** Fully implement discharge monitoring	**By Mar 31:** Annual report data and analysis in accordance with QAPP. Enter water & solids concentrations data into EIM		

Other significant elements of the permit

S1 Application for coverage	Co-Permittees can end or amend agreements at any time.
S4.F Response to violations of Water Quality Standards	Notification and possible adaptive management may occur at any time.
S7 Compliance with Total Maximum Daily Load (TMDL) Requirements	Comply with applicable TMDL requirements listed in Appendix 2 per individual timelines.
S9 Reporting	Keep all records related to the permit for at least five years. Beginning March 31, 2020, annually submit a report for the previous calendar year using WQwebPortal.

G3 Notification of Discharge Including Spills: Report discharge into or from the MS4 which could constitute a threat to human health, welfare or the environment	Discharge to water: Call Emergency Management Division (EMD) 1-800-645-7911 or 1-800-258-5990 Discharge to/from MS4: Report to Ecology within 24 hours (do not need to report if EMD has been called).
G.18 Duty to Reapply	Apply for permit renewal no later than Feb. 2, 2024 (180 days before permit expiration).
G20 Non-compliance Notification	Notify Ecology within 30 days of becoming aware of permit non-compliance.

*Department of Ecology compiled tabl



In 2021, the City submitted to Ecology for review the final draft Baseline Assessment Reports and Stormwater Management Options (SMOs) matrix for 5 of 6 basins. Laughing Jacobs Creek Baseline Assessment is currently being finalized and is based on information provided by the City of Sammamish as part of the Laughing Jacobs Creek Basin Plan.

OVERVIEW

The Goal of the City's Stormwater Planning program is to inform and assist in the development of policies and strategies as water quality management tools to protect receiving waters.

PERMIT REQUIREMENTS

The Permit (section S5.C.1) requires the City to:

- Annually assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID BMPs since local codes were updated in accordance with the 2013 Permit, and the measures developed to address the barriers.
- By August 1, 2020- Convene an interdisciplinary team to inform and assist in the development, progress and influence of this program.
- By March 31, 2021- Permittee shall respond to the series of Stormwater Planning Annual Report Questions to describe how anticipated stormwater impacts on water quality were addressed, if at all, during the 2013-2019 permit term.
- By March 31, 2022- Submit a watershed inventory and include a brief description of the relative conditions of the receiving waters and the contributing areas.
- By June 30, 2022- Document the prioritized and ranked list of receiving waters.
- By January, 2023- Permittee shall respond to the series of Stormwater Planning Annual Report Questions to describe how anticipated stormwater impacts on water quality are currently being addressed.
- By March 31, 2023- Permittees shall develop a SMAP for at least one high priority catchment area.

TABLE 2- CURRENT STORMWATER PLANNING PROGRAMS AND ACTIVITIES 2021

Item	Involvement (Department /Public)	Status and Timeline
Annually assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID BMPs since local codes were updated in accordance with the 2013 Permit, and the measures developed to address the barriers	PWD and CPD	The City continues to work to minimize impervious surfaces, native vegetation loss, and stormwater runoff in all types of development situations, where feasible. The city will continue to make LID the preferred and commonly-used approach to site development in the future.
Convene an interdisciplinary team to inform and assist in the development, progress and influence of this program by August 1, 2020	PWD, CPD, PARKS, , OS, and COM	The City has already completed this in 2019 with the formation of the Stakeholder Group for the SMAP.

PLANNED ACTIVITIES

In 2022, the City will:

- Continue to annually assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID BMPs since local codes were updated in accordance with the 2013 Permit, and the measures developed to address the barriers
- By March 31, 2022- Submit a watershed inventory and include a brief description of the relative conditions of the receiving waters and the contributing areas.
- By June 30, 2022- Document the prioritized and ranked list of receiving waters.
- Continue to meet with the interdisciplinary team to inform in the development, progress and influence of the Stormwater Planning Program.

PUBLIC EDUCATION AND OUTREACH

In 2021 the City joined the regional Dumpster Lid Community Based Social Marketing educational campaign to reduce stormwater contamination. Open dumpsters cause problems for local waterways. When lids are left open, rainwater gets in. Then dumpster juice can leak from dumpsters or pour out when it is emptied into the garbage truck. When this happens, pollution from the dumpster juice gets washed into the nearest storm drain and then flows into creeks and streams.

OVERVIEW

The City's education program aims to target residents, businesses, industries, elected officials, policy makers, planning staff and or other employees of the City. The goal of the education program is to change behaviors and practices that cause or contribute to adverse stormwater impacts. The City's education program is developed locally and regionally with other jurisdictions as well as Issaquah's Office of Sustainability and Public Works Engineering Departments.

PERMIT REQUIREMENTS

The Permit (Section S5.C.2) requires the City to:

- Annually select at a minimum one target audience and one subject area to build general awareness.
- Permittee shall provide and advertise stewardship opportunities and/or partner with existing organizations (including non-permittees) to encourage residents to participate in activities or events planned and organized within the community.
- By July 1, 2020- Permittee shall conduct a new evaluation of the effectiveness of an ongoing behavior change campaign and document lessons learned.
- By February 1, 2021- Permittee shall follow social marketing practices and methods, similar to community based social marketing and develop a campaign tailored to the community.
- By April 1, 2021- Begin to implement the strategy developed.
- By March 31, 2024- Evaluate and report on changes in understanding and adoption of targeted behaviors and any planned or recommended changes to the campaign in order to be more effective.

TABLE 3- CURRENT EDUCATION AND OUTREACH PROGRAMS AND ACTIVITIES 2021

Item	Target Audience/	Department	Activity/ Subject Area*/Status
By February 1, 2021- Permittee shall follow social marketing practices and methods, similar to community based social marketing and develop a campaign tailored to the community	Businesses	PWD	The City joined the regional Dumpster Lid Community Based Social Marketing educational campaign to reduce stormwater contamination. Open dumpsters cause problems for local waterways. When lids are left open, rainwater gets in. Then dumpster juice can leak from dumpsters or pour out when it is emptied into the garbage truck. When this happens, pollution from the dumpster juice gets washed into

Item	Target Audience/	Department	Activity/ Subject Area*/Status
			the nearest storm drain and then flows into creeks and streams
By April 1, 2021- Begin to implement the strategy developed	Businesses	PWD	ongoing
By July 1, 2020- Permittee shall conduct a new evaluation of the effectiveness of an ongoing behavior change campaign and document lessons learned.	Businesses	PWD	No evaluation was conducted of the ongoing behavior change due to the City electing to develop a strategy and schedule for a new target audience and BMP behavior change campaign.
Permittee shall provide and advertise stewardship opportunities and/or partner with existing organizations (including non-permittees) to encourage residents to participate in activities or events planned and organized within the community	Public	Parks	The city held 27 environmental stewardship events in 2021.
Cascade Water Alliance Classes to Issaquah School District	General Public and Youth Education	PWD	The Cascade Water Alliance offers classes to the Issaquah School District providing direct education on water quality and pollution prevention. Class curriculum included: Toadally Amphibians, Healthy Water-Healthy Soil, Watershed Ecosystems, Global

Item	Target Audience/	Department	Activity/ Subject Area*/Status
			Water Crisis (remote), Watch the Flow (remote), Microplastics (remote). Total number of students reached was 260.
Stormwater Outreach for Regional Municipalities (STORM)	General Public and Teachers	PWD	In collaboration with other (STORM) cities, Issaquah provided funding for regional marketing campaigns.
Green Issaquah Partnership	General Public	Parks	The Green Issaquah Partnership is a collaborative effort between the City of Issaquah, Forterra, community groups, nonprofits, schools, businesses and hundreds of volunteers to restore and maintain our forested City parks and open spaces. With City guidance and the support of forest stewards (trained volunteers, who organize and implement forest restoration projects through Issaquah's parks and natural areas), invasive plants will be removed and forest vegetation restored to create healthy and sustainable forest habitat. Forest Stewardship training and recruitment happens throughout the year.
Puget Sound Starts Here Storm Drain Markers	General Public/ Businesses	PWD	"Puget Sound Starts Here" storm drain markers are available to general public and businesses.
City Website, Social Media, Channel 21 and Sammamish Reporter	General Public	PWD/COM	Promote community activities, opportunities, STORM outreach and education, and Pollution Prevention awareness.

Item	Target Audience/	Department	Activity/ Subject Area*/Status
Spill Reporting, and Illicit Discharge Awareness	General Public	PWD	Water quality complaint, spill reporting, and illicit discharge reporting information is provided through the City website, business cards, email signatures, and brochures/ fact sheets.
Source Control Business Technical Assistance Program	Businesses	PWD	Technical assistance is provided to businesses and focuses on stormwater and hazardous materials practices, spill prevention, storage, and disposal with the goal of preventing harmful discharges to the stormwater system.
Critical Aquifer Recharge Area (CARA) Outreach	Businesses	PWD	Brochure, fact sheets, and onsite assistance is provided to business operating within the CARA on the importance of protecting groundwater, related City code requirements, hazardous materials management, storage, and disposal.
Private Storm Inspections	Property Managers and Businesses	PWD	Private stormwater infrastructure maintenance inspections are conducted to increase awareness of the stormwater system and reduce the discharge of sediment and pollutants. Fact sheets and additional resources and education material is provided.
On-Site Septic Inspection Program	Residents	PWD	Properties with private septic systems, which are located adjacent to City sewer, were provided septic system education and maintenance summaries.
Fats, Oil, and Grease (FOG) Outreach	Businesses	PWD	Restaurants were provided technical assistance, brochures and mailings on

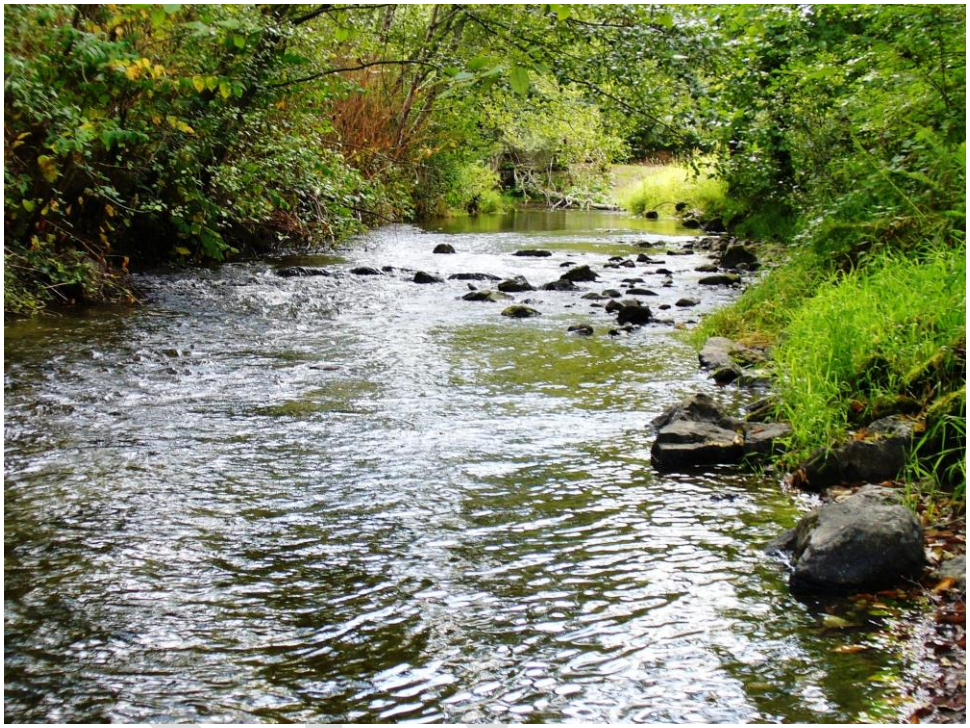
Item	Target Audience/	Department	Activity/ Subject Area*/Status
			FOG management related to both sewer and stormwater.
* To build general awareness, all Target Audiences (both General Public and Business) were given information on the subject area of the general impacts of stormwater on surface waters, including impacts from impervious surfaces			

PLANNED ACTIVITIES

In 2022, the City will:

- As Covid shutdowns allow, the City will prioritize existing programs and develop new programs based on NPDES education activities and strategy. Many of the programs listed in Table 3 will continue in 2022.
- Continue to provide citizen stewardship opportunities that encourages community engagement in addresses the impacts from stormwater runoff.
- Continue coordination and collaboration with other NPDES jurisdictions and STORM/regional awareness programs.
- Continued strategy implementation of the Dumpster Lid Campaign.

PUBLIC INVOLVEMENT AND PARTICIPATION



Issaquah has a seven-member council that's serves as the City's legislative body, while the Mayor is Issaquah's chief administrative officer.

OVERVIEW

The goal of public involvement and participation is to provide ongoing opportunities for public to participate in the decision making process through advisory councils, watershed committees, participation in developing rate-structures, stewardship programs, environmental activities, and/or other similar activities. The City will comply with applicable State and local public notice requirements when developing its SWMP.

PERMIT REQUIREMENTS

The Permit (Section S5.C.3) requires the City to:

- Create opportunities for the public to participate in the decision making processes involving the development, implementation, and updates of the Permittee's SMAP and SWMP.
- Make available the SWMP and Annual Report to the public, including posting on the City's website.

TABLE 4- CURRENT PUBLIC INVOLVEMENT ACTIVITIES 2021

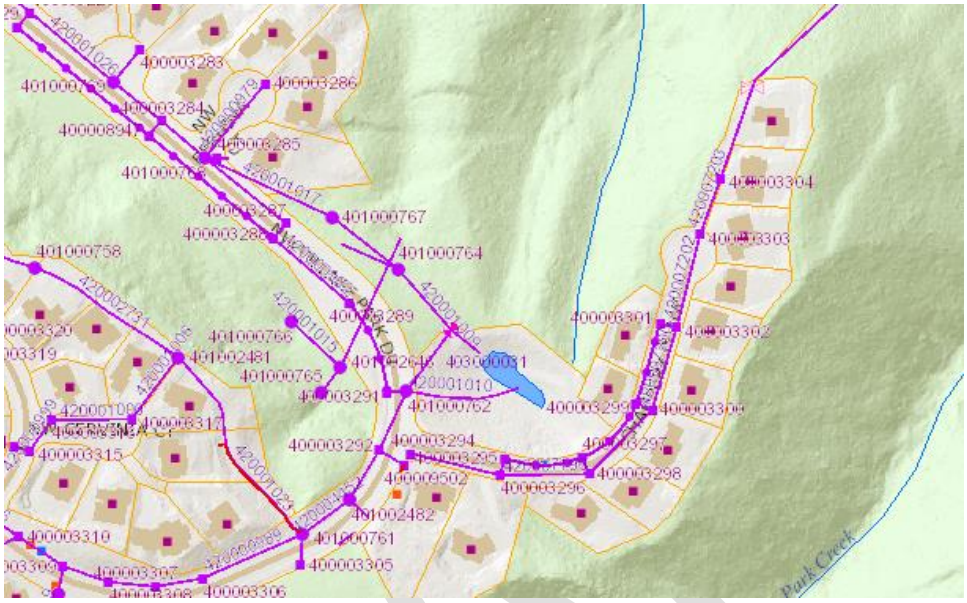
Item	Involvement (Department /Public)	Status and Timeline
Created in 2020, the objective of the Environmental Board is to protect, preserve and enhance the natural environment and take action on climate change to reduce its impacts by advising the Mayor, City Council and City departments on the City's plans, policies, regulations and programs related to environmental stewardship.	PWD, CPD, OS and Environmental Board	Ongoing
Any studies, projects, or other actions that require City Council input include a process for public participation, including public notices, public discussions at council committee meetings, and public input at council meetings.	All City Departments	Ongoing
The City maintains web pages containing the Annual Report, LID, and other associated materials, located under the Public Works Engineering home page. The web page is updated with the latest Annual Report and SWMP each year. **http://www.issaquahwa.gov/stormwaterpermit**	PWD	Posted for public comment SWMP on the City website by March 31, 2022

PLANNED ACTIVITIES

In 2022, the City will:

- Continue to make the SWMP and other aspects of the Stormwater Program available for comment in 2022.
- Post the SWMP on the City website by March 31, 2022.

MS4 MAPPING AND DOCUMENTATION



The City maintains all mapping electronically in our Geographic Information System.

OVERVIEW

The goal of the City's MS4 Mapping and Documentation program is to create and maintain useful and accurate mapping data.

PERMIT REQUIREMENTS

The Permit (Section S5.C.4) requires the City to:

- Ongoing Mapping Requirements:
  - Known MS4 outfalls and known MS4 discharge points.
  - Receiving waters, other than groundwater.
  - Stormwater treatment and flow control BMPs/facilities owned or operated by the Permittee.
  - Geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface waters.

    - Tributary conveyances to all known outfalls and discharge points with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. The following features or attributes (or both) shall be mapped:
        - (a) Tributary conveyance type, material, and size where known.
        - (b) Associated drainage areas.
        - (c) Land use.
    - Connections between the MS4 owned or operated by the Permittee and other municipalities or public entities.
    - All connections to the MS4 authorized or allowed by the Permittee after February 16, 2007.
- New Mapping Requirements:
    - By January 1, 2020- begin to collect size and material for all known MS4 outfalls during normal course of business.
    - By August 1, 2021- Format all mapping to electronic (e.g. Geographic Information System, CAD, etc.) with fully described mapping standards.
    - By August 1, 2023- Complete mapping of all known connections from the MS4 to a privately owned stormwater system.

TABLE 5- CURRENT MS4 MAPPING AND DOCUMENTATION PROGRAMS AND ACTIVITIES 2021

Item	Involvement (Department /Public)	Status and Timeline
Permittee shall maintain mapping data for the features listed in the Ongoing Mapping Requirements.	IT/PWD	Ongoing
By January 1, 2020 – begin to collect size and material for all known MS4 outfalls during normal course of business	IT/PWD	Complete and will update as needed
By August 1, 2021- Format all mapping to electronic (e.g. Geographic Information System, CAD, etc.) with fully described mapping standards.	IT/ PWD	Complete

PLANNED ACTIVITIES

In 2022, the City will:

- Continue with all ongoing mapping requirements.

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

Issaquah has proper procedures in place for Illicit Discharge Detection and Elimination. In 2021, Issaquah responded to and eliminated 61 illicit discharges.

OVERVIEW

The Illicit Discharge Detection and Elimination (IDDE) program is designed to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the MS4.

PERMIT REQUIREMENTS

The Permit (Section S5.C.5) requires the City to:

- Have procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when they are suspected or identified.
- Permittees shall inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste.
- Permittee shall implement an ordinance or other regulatory mechanism to effectively prohibit non-stormwater, illicit discharges into the Permittee's MS4 to the maximum extent allowable under state and federal law.
- Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4. Program to include:
    - Procedures for conducting investigations of the Permittee's MS4, including field screening and methods for identifying potential sources, procedures may include source control inspections.
        - Permittees shall complete field screening for an average of 12% of the MS4 each year. Permittees shall annually track total percentage of the MS4 screened beginning August 1, 2019.
    - A publicly listed and publicized hotline or other telephone number for public reporting of spills and other illicit discharges
    - An ongoing training program for all municipal field staff, who, as part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge and/or illicit connection to the MS4, on the identification of an illicit discharge and/or connection, and on the proper procedures for reporting and responding to the illicit discharge and/or connection
- Permittee shall implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the Permittee's MS4.
- Permittees shall train staff who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, and illicit connections, to conduct these activities.
- Permittee shall track and maintain records of the activities conducted to meet the requirements of this Section

TABLE 6- CURRENT IDDE ACTIVITIES 2021

Item	Involvement (Department/ Public)	Status and Timeline
The City responds to reports from the public and other staff when notified of spills and has established procedures to investigation of the source and perform follow-up, including documented code enforcement, per permit conditions.	PWD , and CPDD	Ongoing
The spill reporting hotline number (425) 837-3470 is available on the City website. On-line stormwater concerns can be input at: http://issaquahwa.gov/RequestTracker.aspx	PWD	Ongoing
Business source control visits were completed in 2021. The City educates businesses about the hazards associated with improper storage of product and wastes, best management practices, and stormwater infrastructure maintenance. Illicit discharges found during inspections are recorded and addressed.	PWD	57 inspections were performed in 2021.
Permittee shall implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the Permittee's MS4.	PWD	Average of 12% MS4 field screened in 2019-2020. 10.8% was inspected in 2021 due to staff layoffs due to City vaccine mandate.
Tracking of illicit discharge investigations and spill response actions completed in 2021. Inspection dates, follow-up visits, water quality complaints and concerns, and related activities are	PWD	Investigated 61 spills and/or water quality

Item	Involvement (Department/ Public)	Status and Timeline
documented within the City's TRAKiT program or PWD database.		complaints in 2021.
Training has been developed and implemented for municipal staff that may observe or come into contact with illicit discharges. Procedures for reporting and responding to the illicit discharge or connection were created.	PWDCPD, IPD, and Parks Facilities Maintenance	Training occurred in 2021. Follow-up training will occur as needed.
The City informs public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste through education, technical assistance visits to businesses, stormwater inspections, and training.	PWD, and CPD	Ongoing

PLANNED ACTIVITIES

In 2022, the City will:

- Increase our field screening percentage for non-stormwater discharges and illicit connections to get back to the 12% average.
- Continue to track the number of illicit discharges and illicit connections, including spills.
- Continue to review and refine education programs that address the hazards of illicit discharges and the importance of reducing pollutants in permitted non-stormwater discharges.
- Continue business source control pollution prevention visits.
- Continue non-NPDES permitted stormwater facility inspections.
- Continue to implement training for field staff to recognize and report IDDE.

CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT AND CONSTRUCTION SITES

The City inspects active construction sites to control run-off. TESC failures are brought back into compliance through enforcement actions, as necessary. In 2021, the City inspected 71 sites.

OVERVIEW

The City shall implement and enforce a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities. The program shall apply to private and public development, including transportation projects.

PERMIT REQUIREMENTS

The Permit (Section S5.C.6) requires the City to:

- By June 30, 2022- Permittee shall adopt and make effective a local program that meets the requirements of the Permit addressing runoff from new development, redevelopment, and construction sites.
- Permittee's local program to include a permitting process with site plan review, inspection and enforcement capability to meet the standards listed below:
    - Review of all stormwater site plans for proposed development activities.
    - Inspect, prior to clearing and construction, all permitted development sites that have a high potential for sediment transport.
    - Inspect all permitted development sites during construction to verify proper installation and maintenance of required erosion and sediment controls.
    - Inspect all stormwater treatment and flow control BMPs/facilities, and catch basins, in new residential developments every six months, until 90% of the lots are constructed (or when construction has stopped and the site is fully stabilized).
    - Inspect all permitted development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities.
    - Procedures for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained.
    - An enforcement strategy shall be implemented to respond to issues of noncompliance.
- Program shall make available, as applicable, the link to the electronic Construction Stormwater General Permit Notice of Intent (NOI) form for construction activity and, as applicable, a link to the electronic Industrial Stormwater General Permit NOI form for industrial activity to representatives of proposed new development and redevelopment
- Ensure that all staff are trained to conduct these activities.

TABLE 7- CURRENT CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT, AND CONSTRUCTION SITE ACTIVITIES 2021

Item	Involvement (Department/ Public)	Status and Timeline
Permittee shall adopt and make effective a local program that meets the requirements of the Permit addressing runoff from new development, redevelopment, and construction sites by June 30, 2022.	PWD/CPD/Parks	Stormwater Design Manual Update kick-off meeting held in October 2021. Process is on track for June 30, 2022 adoption.
Record keeping is done through the City permit software (TrakiT) for site plan review and inspections.	CPDD and PWD	Ongoing
The City inspects before clearing (initial inspection), and during construction (TESC inspection) all development/re-development sites, triggering stormwater requirements.	CPDD and PWD	71 permitted sites in 2021
The City inspected all permitted development sites upon completion of construction to ensure proper installation of permanent stormwater facilities and structural BMPs (Final TESC inspection).	CPD and PWD	Ongoing
The City has ordinances that identify ownership, maintenance, repairs, operation, and inspection of private stormwater facilities.	CPDD and PWD	Ongoing
City staff attended training on erosion control, LID, and inspection reporting. These training opportunities are made available through a variety of venues and training records are maintained.	PWD and CPDD	Training completed in 2021 and is ongoing
Relevant SOPs are reviewed and updated as opportunities for process improvements are identified.	CPDD and PWD	Ongoing

PLANNED ACTIVITIES

In 2022, the City will:

- Continue the Stormwater Design Manual update to meet the June 30, 2022 deadline.
- The City plans to continue the items listed in Table 7. City staff will continue to attend trainings in LID and Green Infrastructure, erosion control, site inspection, and recordkeeping.
- Continue to evaluate and improve processes related to the adoption of the Stormwater Manual and LID/ Stormwater/ Land Use code updates, and internal SOPs.
- City staff will provide ongoing training related to site inspection practices, recordkeeping, stormwater review and erosion control training.

OPERATION AND MAINTENANCE

City Operations Staff utilize the Triverus MCV for permeable pavement maintenance. In 2021 the City cleaned and maintained 158,780sq. ft. of permeable pavement.

OVERVIEW

An operations and maintenance (O&M) program for municipal operations includes a training component which aims at preventing or reducing pollutant runoff from municipal operations. The program primarily targets the Public Works Operations and the Parks and Recreation Departments (which includes Facilities Maintenance).

PERMIT REQUIREMENTS

The Permit (Section S5.C.7) requires the City to:

- Implement maintenance standards that are as protective, or more protective, of facility function than those specified in the Stormwater Management Manual for Western Washington.

    - No Later than June 30, 2022, Permittees shall update their maintenance standards as necessary to meet the requirements of this Section.
- Provisions to verify adequate long-term O&M of stormwater treatment and flow control BMPs/facilities that are permitted, constructed, and regulated by the Permittee. The provisions shall include:
    - Implementation of an ordinance or other enforceable mechanism
    - Annual inspections of all stormwater treatment and flow control BMPs/facilities that discharge to the MS4
    - Complete 80% of required inspections
    - Procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records
- Permittee shall implement and document a program to regulate maintenance of stormwater facilities owned or operated by the Permittee
    - Implement a program to annually inspect all municipally owned or operated stormwater treatment and flow control BMPs/facilities, and taking appropriate maintenance actions in accordance with the adopted maintenance standards.
    - Spot check potentially damaged stormwater treatment and flow control BMPs/facilities after major storm events
    - Inspect all catch basins and inlets owned or operated by the Permittee every two years
        - Inspections every two years may be conducted on a "circuit basis" whereby 25% of catch basins and inlets within each circuit are inspected to identify maintenance needs
    - Complete 95% of required inspections.
- No later than December 31, 2022, document the practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee.
- Implement an ongoing training program for employees of the Permittee whose primary construction, operations, or maintenance job functions may impact stormwater quality
- Implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this Permit that are not required to have coverage

under the Industrial Stormwater General Permit or another NPDES permit that authorizes stormwater discharges associated with the activity

- Maintain records of the activities conducted to meet the requirements of this Section

TABLE 8- CURRENT OPERATION AND MAINTENANCE ACTIVITIES 2021

Item	Involvement (Department/ Public)	Status and Timeline
The City has had a longstanding program to maintain public stormwater facilities (including UICs). SOPs have been updated to reflect the adoption of the 2012 *Stormwater management Manual for Western Washington (as amended in 2014)*.	PWD	Ongoing
To meet the Permit requirements, the inspection program annually inspected and maintained municipally owned or operated stormwater treatment and flow control facilities in 2021.	PWD	99% of City facilities inspected in 2021.
Spot checks of potentially damaged permanent treatment and flow control facilities are inspected after major storms (greater than 24hr, 10 year occurrence).	PWD	Spot Checks were conducted following any 10 year event.
City stormwater maintenance program includes catch basin inspections and maintenance. Documentation of maintenance activities is done through the work order management system. The city has adopted a modified circuit based approach for meeting this requirement.	PWD	Ongoing
Public Works Operations developed SOPs for material management and maintenance activities that are intended to be living documents and will be updated as needed.	PWD	Ongoing

Item	Involvement (Department/ Public)	Status and Timeline
The Parks and Facilities Maintenance Departments have developed a set of SOPs for Parks maintenance activities.	Parks Facilities Maintenance	Ongoing
The City has two maintenance facilities that are considered appropriate for having a SWPPP: the Public Works Operations Facility (City Shop) and the Parks Maintenance Facility.	Parks Facilities Maintenance and PWD	SWPPPs updated to reflect changes in conditions.
City departments conduct regular training for staff in accordance with established SOPs and other job description requirements.	Parks Facilities Maintenance andPWD	Completed in 2021 and ongoing annually
Private stormwater treatment and flow control BMPs/facilities inspections were completed on permitted sites. All permitted BMPs/facilities are inspected annually. The City also has a maintenance program for non-permitted existing private stormwater infrastructure.	PWD	100% of private facilities inspected in 2021.

PLANNED ACTIVITIES

In 2022, the City will:

- Review of SOP's will occur as needed in the Stormwater Design Manual/ Standards update process. New Manual/Standards to be adopted by June 30, 2022.
- No later than December 31, 2022, document the practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee
- Continue to implement training programs for staff whose work could impact stormwater.

- Continue to improve and update tracking and documentation efficiency methods and procedures associated with inspection and maintenance activities.
- Continue to annually inspect all stormwater facilities both owned or operated by the Permittee and regulated by the Permittee.
- Update SWPPPs when conditions change at City facilities and refine practice and training.
- The City plans to continue the items listed in Table 8.

SOURCE CONTROL PROGRAM FOR EXISTING DEVELOPMENT

The City conducted 57 Local Source Control inspections through our Pollution Prevention Assistance Partnership with the Department of Ecology.

OVERVIEW

The City shall implement a program to prevent and reduce pollutants in runoff from areas that discharge to the MS4. Through application of ordinances and completing inspections, the City will apply operational source control BMP's, and if necessary, structural source

control BMP's/ facilities, to pollution generating sources associated with existing land uses and activities.

PERMIT REQUIREMENTS

The Permit (Section S5.C.8) requires the City to:

- By August 1, 2022- Permittees shall adopt and make effective an ordinance(s), or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities.
- By August 1, 2022- Permittees shall establish an inventory that identifies publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4.
- By January 1, 2023- Permittees shall implement an inspection program for sites identified in the developed inventory.
    - Permittee shall annually complete the number of inspections equal to 20% of the businesses and/or sites listed in their source control inventory.
    - Permittee shall inspect 100% of sites identified through credible complaints.
    - Permittees may count inspections conducted based on complaints, or when the property owner denies entry, to the 20% inspection rate.
- By January 1, 2023- Permittee shall implement a progressive enforcement policy that requires sites to comply with stormwater requirements.
- Permittees shall train staff who are responsible for implementing the source control program to conduct these activities.

CURRENT ACTIVITIES

The City currently has an active Source Control program that is funded through an Interagency Agreement with the Department of Ecology's Pollution Prevention Assistance (PPA) Partnership. To meet the August 1, 2022 deadlines above, the City is updating our existing code as needed as apart of the Stormwater Design Manual/ Standards update process. A kick-off meeting was held in October 2021 for this process.

PLANNED ACTIVITIES

In 2022, the City will:

- Source Control code update will occur alongside the Stormwater Manual/ Standards update process to meet the August 1, 2022.

TMDL REQUIREMENTS

Issaquah Creek Basin streams are impaired with too much bacteria as measured by fecal coliform bacteria counts in the water.

OVERVIEW

Requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs

are those which have been approved by the EPA on or before the date permit coverage is granted.

PERMIT REQUIREMENTS

The Permit (Section S7) requires the City to:

- Comply with the specific requirements identified in Appendix 2
    - Screen for bacteria sources when conducting IDDE related field screening in any MS4 sub-basins which discharge to surface waters in the TMDL area. Implement associated schedules and activities in S5.C.5 in response to any illicit discharges found.
    - Install and maintain pet waste education and collection stations at municipal parks and other Permittee owned and operated lands adjacent to streams. Focus on locations where people commonly walk their dogs.

TABLE 10- CURRENT TMDL ACTIVITIES 2021

Item	Involvement (Department/ Public)	Status and Timeline
Pet waste stations are placed and maintained in City owned parks and open spaces which are located adjacent to streams. Roughly 80,000 pet waste bags were supplied in 2021.	PWD	Ongoing
Bacteria sources are screened for when conducting IDDE related field investigations in any MS4 sub-basins, which discharge to surface waters in the TMDL area.	PWD	Ongoing

PLANNED ACTIVITES

In 2022, the City will:

- Screen for bacteria sources when conducting IDDE related field screening in any MS4 sub-basins, which discharge to surface waters in the TMDL area.
- Continue to place and maintain pet waste stations in parks and open space areas adjacent to streams.

MONITORING AND ASSESSMENT

OVERVIEW

This section describes the Permit requirements related to water quality monitoring and current and planned activities.

PERMIT REQUIREMENTS

The Permit (Section 8) requires the City to:

- Issaquah is not required to conduct water sampling or other testing unless associated with TMDL requirements or illicit discharge (Section S7).
- By December 1, 2019- Notify Ecology in writing which of the two options (S8.A.2.a or S8.A.2.b) the City chooses for regional status and trends monitoring
    - (S8.A.2.a)-Make annual payments into a collective fund to implement regional receiving water status and trends monitoring of either: small streams and marine nearshore areas in Puget Sound
    - (S8.A.2.b)- Conduct stormwater discharge monitoring per the requirements in S8.C
- By December 1, 2019- Notify Ecology, in writing, which of the two options (S8.B.2.a or S8.B.2.b) the City chooses for SWMP Effectiveness and Source Identification Studies
    - (S8.B.2.a)- Make annual payments into a collective fund to implement effectiveness and source identification studies

- (S8.B.2.b)- Conduct stormwater discharge monitoring per the requirements in S8.C

TABLE 11- CURRENT MONITORING ACTIVITIES 2021

Item	Involvement (Department/ Public)	Status and Timeline
Continued with the City's program for monitoring of surface waters (program started in 1999). Monitoring data is collected and maintained by the City.	PWD	Ongoing
The City notified Ecology of its intent to participate in the Stormwater Action Monitoring (SAM). The City will provide a payment of $16,851 to Ecology to fund the SAM, payments will occur annually for five years of the Permit. The payment covers Regional Status and Trends Monitoring ($5,960) and Stormwater Management Program Effectiveness and Source Identification Studies ($10,891) by December 1, 2019.	PWD	Complete

PLANNED ACTIVITIES

In 2022, the City will:

- Continue the ambient water quality monitoring program on local streams.
- Continue to participate in regional monitoring forums.
- Participate in the annual cost sharing for the SAM.

REPORTING REQUIREMENTS

OVERVIEW

This section describes the Permit requirements reporting and record keeping requirements and current and planned activities. The Annual Report and SWMP are prepared and reported each year to the Department of Ecology and posted on the City's website. The SWMP has been developed, reviewed, and updated annually in coordination with affected City departments. As part of the implementation of the SWMP the City gathers, tracks, maintains, and uses information on an ongoing basis to evaluate the SWMP development and implementation.

PERMIT REQUIREMENTS

- The City shall submit an annual report electronically no later than March 31 of each year.
    - Annual Report to include:
        - Copy of the Permittee's SWMP Plan
        - Submittal of the Annual Report form describing the status of implementation of the requirements of this Permit
        - Attachments of summaries, descriptions, report, and other information as required
        - Certification and signature pursuant to G19.D, and notification of any changes to authorization pursuant to G19.C.
        - A notification of any annexations, incorporations or jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period.
- Records related to the Permit and SWMP shall be retained for at least five years.
- Records related to the Permit and SWMP shall be made available to the public at reasonable times during business hours.

CURRENT ACTIVITIES

- Projected and future work items are incorporated into The SWMP as part of the Annual Report.
- The SWMP will be posted on the City's website prior to March 31, 2022.

PLANNED ACTIVITIES

- The SWMP is updated to incorporate progress on implementation and changes to projected work items. The SWMP will be posted by March 31, 2022 on the City's website and the annual report submitted electronically.
- The City will continue to keep all records related to the permit and SWMP and will make records related to these available to the public.